

MONTHLY WEATHER REVIEW.

Editor: Prof. CLEVELAND ABBE. Assistant Editor: FRANK OWEN STETSON.

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The MONTHLY WEATHER REVIEW is based on data from about 3500 land stations and many ocean reports from vessels taking the international simultaneous observation at Greenwich noon.

Special acknowledgment is made of the data furnished by the kindness of cooperative observers, and by R. F. Stupart, Esq., Director of the Meteorological Service of the Dominion of Canada; Señor Manuel E. Pastrana, Director of the Central Meteorological and Magnetic Observatory of Mexico; Camilo A. Gonzales, Director-General of Mexican Telegraphs; Capt I. S. Kimball, General Superintendent of the United States Life-Saving Service; Commandant Francisco S. Chaves, Director of the Meteorological Service of the Azores, Ponta Delgada, St. Michaels, Azores; W. N. Shaw, Esq., Director Mete-

orological Office, London; H. H. Cousins, Chemist, in charge of the Jamaica Weather Office; Rev. L. Gangoiiti, Director of the Meteorological Observatory of Belen College, Havana, Cuba.

As far as practicable the time of the seventy-fifth meridian is used in the text of the MONTHLY WEATHER REVIEW.

Barometric pressures, both at land stations and on ocean vessels, whether station pressures or sea-level pressures, are reduced, or assumed to be reduced, to standard gravity, as well as corrected for all instrumental peculiarities, so that they express pressure in the standard international system of measures, namely, by the height of an equivalent column of mercury at 32° Fahrenheit, under the standard force, i. e., apparent gravity at sea level and latitude 45°.

FORECASTS AND WARNINGS.

By Prof. E. B. GARRIOTT, in charge of Forecast Division.

IN GENERAL.

From the 5th to 9th barometric pressure was high over the Iceland area and European Russia and low over middle-western and southwestern Europe; this was a period of cold weather in western and southwestern Europe. From the 18th to 23d barometric pressure was low over the Iceland area and northern Europe and high over the central Siberian district; during this period the British, North Sea, and northern European coasts were storm swept. Azores pressure was uniformly high except from the 23d to 26th.

In the United States February was generally a cold month east of the Mississippi River, and from the upper Ohio Valley to the middle Atlantic and New England coasts the deficiency in temperature was more than 6°. West of the Mississippi the temperature averaged above the normal, the greatest excess being shown in the middle districts between the Rocky Mountain and Pacific coast ranges of mountains.

The month opened cold in central and northern districts between the Mississippi River and the Rocky Mountains, and the cold gradually extended thence eastward to the Atlantic and middle and east Gulf coasts. On the 4th a temperature of 50° below zero was reported at Solon Springs, Wis. From the 4th to 9th freezing temperatures occurred in the east Gulf States, on the 8th and 9th in northern counties of Florida, and on the 7th temperatures below zero were noted in Atlantic coast States north of Virginia.

On the 4th and 5th heavy snow fell in the Middle Atlantic and New England States, and on the latter date the snowfall in New England varied from six to thirteen inches. On the 11th a fall of one and one-half inches of snow was reported at Mexico, Mex. On the 23d and 24th a snowstorm extended from the Ohio Valley over the Middle Atlantic and New England States. On the 15th and 16th heavy snow and high winds were reported at Valdez, Alaska.

The severest gale of the month on the Great Lakes occurred on the 1st. On the 5th the middle Atlantic and New England coasts were visited by a heavy windstorm.

BOSTON FORECAST DISTRICT.

The weather of the month was exceptionally cold, the monthly mean temperature for the entire district, 15.9°, being 6.9° below the February normal, and one of the lowest of record for this month. The coldest periods were the 7th, 12th, 13th, 23d, 24th, and 28th. The precipitation was nearly all snow.

The snowfall was well distributed over the section; it somewhat exceeded that of the preceding month and was fully up to the average for February. Owing, however, to the low temperatures that generally obtained during the storms the snow was very dry, and the water equivalent, melted precipitation, was below the average, the monthly mean, 2.08 inches, being 1.63 inches below normal. The most severe storm occurred on the 5th, when from six to thirteen inches fell, the larger amounts being on the coast. This storm was accompanied by severe northeast gales that at the most exposed coast stations attained velocities of 70 miles per hour. There was no great loss or damage to shipping and little if any loss of life, and there were fewer destructive storms than usual for February. Warnings were displayed for the storms, but in one or two instances the announcements were somewhat late. There were no marked failures in the forecasts.—*J. W. Smith, District Forecaster.*

NEW ORLEANS FORECAST DISTRICT.

The month, as a whole, was abnormally dry and warm throughout the district. The only severe weather worthy of note prevailed during the 3d, 4th, and 5th, when a cold wave occurred over the northwestern portion of the district and freezing temperatures were recorded southward into the southern portions of Texas and Louisiana. Cold-wave warnings were issued for portions of the district on the 2d and 4th, and freezing temperature warnings were issued for considerable areas on the 2d, 3d, and 5th, well in advance of the severe weather conditions. A general heavy frost, which was covered by warnings, occurred over Louisiana on the 9th. No warnings were issued during the second and third decades and no severe weather conditions occurred during that time. No general storms occurred along the west Gulf coast and no storm warnings were issued.—*I. M. Cline, District Forecaster.*

LOUISVILLE FORECAST DISTRICT.

There were only two pronounced cold periods, 3d–9th and 21st–23d, the temperatures during the rest of the month being about or somewhat above the normal. Rain or snow occurred frequently during the first and last weeks, but during the middle of the month the weather was mostly fair and seasonably pleasant. There were but two snowstorms of consequence, one on the 4th, the other (the heaviest of the winter) on the 23d.

Cold-wave warnings were ordered on the 2d, in advance of